



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,982	10/16/2003	Ingo Baumann	MAIKP104US	8127

29393 7590 06/28/2005

ESCHWEILER & ASSOCIATES, LLC
NATIONAL CITY BANK BUILDING
629 EUCLID AVE., SUITE 1210
CLEVELAND, OH 44114

EXAMINER

RAHLL, JERRY T

ART UNIT PAPER NUMBER

2874

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/686,982

Applicant(s)

BAUMANN ET AL.

Examiner

Jerry T. Rahl

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10, 11, 13, 14, 16, 18-21, 28, 29, 32, 34 and 36 is/are rejected.
- 7) ☒ Claim(s) 4-9, 12, 15, 17, 22-27, 30-31, 33 and 35 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/16/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 16 October 2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1–3, 10-11, 14, 18-21, 28-29, 32 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application 2003/0142926 to Dallas et al.
5. Dallas et al. describes an optical system with an optical component (see Paragraph [0034]) in communication with a waveguide (417) and an adjustment device (416) interposed between the optical component and the waveguide, where the adjustment device comprises an auxiliary waveguide (418) with at least one end (420) movable to facilitate (see Paragraph [0035]) a predetermined optical coupling between the optical component and the waveguide (see Figure 4 and Paragraphs [0031]-[0039]).

Art Unit: 2874

6. Further, Dallas et al describes the waveguide residing on a carrier substrate (419) comprising a planar lightwave circuit.
7. Further, Dallas et al describes the adjustment device formed on an auxiliary substrate (403).
8. Further, Dallas et al describes the moveable end of the auxiliary waveguide operable to be deflected and adjusted by a thermal force (see Paragraph [0031]).
9. While Dallas et al does not specifically describe the auxiliary waveguide operable to move in a direction perpendicular to a longitudinal direction of the auxiliary waveguide, once the solder (416) of Dallas et al. has melted, the auxiliary waveguide would inherently be operable to move in a direction perpendicular to a longitudinal direction of the auxiliary waveguide due to the low resistance of the melted solder to such movement.
10. Further, Dallas et al describes the optical component as an optical laser (see Paragraph [0034]).
11. Further, Dallas et al describes a holding component (solder 416, once cooled) to fix the movable end of the auxiliary waveguide upon establishing the optical coupling.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 16 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dallas et al. as applied to claims 1 and 19, above.

Art Unit: 2874

14. Dallas et al. does not specifically describe the carrier substrate comprising a glass, silicon or SOI substrate or the waveguide comprising a glass or polymer waveguide. However, since Dallas et al. is mute to the materials of the substrate and waveguide, it would have been obvious to one of ordinary skill in the art to use any material commonly used for substrates or waveguides in optical systems for easy manufacturing. The examiner takes official notice that glass and silicon are the most commonly used material for substrates in optical systems. The examiner takes official notice that glass and polymer are the most commonly used material for waveguides in optical systems. Therefore, it would have been obvious to one of ordinary skill in the art to use the above described materials for the substrate and waveguide to allow for easy manufacture of the optical system.

Allowable Subject Matter

15. Claims 4-9, 12-13, 15, 17, 22-27, 30-31, 33 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Claims 4-8 and 22-26 describe the optical component mounted on or in the auxiliary substrate.

17. Claims 9 and 27 describe the adjustment device and carrier device mounted on a separate substrate.

18. Claims 12 and 30 describe the auxiliary waveguide moved to achieve attenuation between the component and waveguide.

19. Claim 13 and 31 describe a space between the adjustment device and component filled with a composition.

Art Unit: 2874

20. Claims 15 and 33 describe interposing a second adjustment device between the component and waveguide.

21. Claims 17 and 35 describe adapting a mode field of the waveguide or component with a mode field of the auxiliary waveguide.

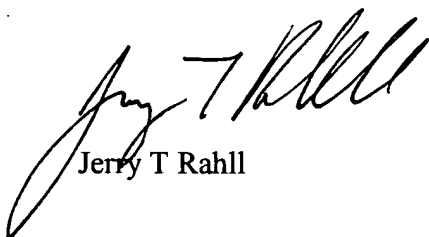
Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U. S. Patents Nos. 4,065,203, 6,490,392 and 6,748,131 describe optical systems having adjustable devices with waveguides.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T. Rahll whose telephone number is (571) 272-2356. The examiner can normally be reached on M-Th (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jerry T Rahll



AKM ENAYET ULLAH
PRIMARY EXAMINER